



SLP-88 Vacuum Tube Stereo Preamplifier

Operation and Installation Manual

Please read this manual carefully before installing your new SLP-88 into your stereo system. It contains important set up and installation information as well as safety warnings regarding AC voltage inside the chassis.

Dear Audiophile Friend:

I would like to take this opportunity personally to thank you for buying your new Cary Audio SLP-88 preamplifier. I have spent countless hours designing and voicing the SLP-88. You will find many desirable features on your new preamplifier. The motorized remote volume is certainly a stand out feature. The analogue signal is not deteriorated with this method of remote volume control. The high performance motorized volume potentiometer we use to control the analog input signal level is driven mechanically by a DC motor. An inboard microprocessor directs this motor in the proper direction for up or down volume level changes. All incoming signals are switched via gold plated relays that are also DC voltage controlled. Another very cool feature of your new SLP-88 is the earphone output. This is true single-ended triode sound accomplished with output transformers to match earphones from 40 to 600 ohms. The best feature of the SLP-88 is the sonic presentation. The 6SN7 triode tubes used in the SLP-88 are considered by many as the absolute best sounding dual triode available. Please read the instruction manual so you are familiar with the operation of your new "Special Line Stage 88."

Thank you once again for your interest and continued support of Cary Audio Design.

Dennis J. Had
President

SPECIFICATIONS: SLP-88

Dimensions: 16" W x 5" H x 12" D

Weight: 15 lb..

Circuit: Class A Triode

Input Impedance: 100,000 (100K) ohms resistive

Output Impedance: 680 ohms

Gain: 20 dB

Signal/Noise Level: -88 dB

Resistors: 1 % metal film

Capacitors: Film and foil output caps, 5 micro farad (5 mFd)

Power Transformer: 200% continuous commercial duty cycle

Tubes: 2- 6SN7 dual triodes

Power Supply: Full wave rectification, center-tapped, pi-network with filter choke, fully regulated

AC

Power Requirements: 100 – 130 volts AC / 50-60 Hz at 24 watts
200 – 245 volts AC / 50-60 Hz at 24 watts

Wire: EE Teflon Silver

Warm-up Time: 5 minutes (2 minute auto mute)

Input and

Output Jacks: Gold plated with Teflon inserts

Duty Cycle: Continuous duty 24 hours per day

This section describes the basic specifications of the SLP-88 at the time of printing. Specifications are subject to change or improvement without notice or obligation.

FRONT PANEL FEATURES

Power Switch: Rotary 2 position: off/on controls the AC line voltage

Mute: Terminates the output, also operated via remote hand set

Input Select: 4 position rotary switch controls relay input switching

Tape Monitor: 2-position rotary switch engages tape loop circuit

Headphone: 2-position rotary switch will engage headphone transformers

Listening Level: Motorized volume control, manual or via remote

On LED: Indicates internal power supply is power up

Operate LED: Indication of time delay release (approximately 1 minute)

Mute LED: Lights up when the preamplifier is in mute mode

Tape LED: indication of tape monitor loop in operation

Down LED: Lights up red as remote volume is turned to a lower setting.

Up LED: Lights up blue as the remote volume is turned to a higher setting.

REAR APRON FEATURES

AC Connector: Inlet for the detachable AC power cord, standard IEC plug

AC Fuse: !!VERY IMPORTANT!! ONLY USE 1 AMP Slow Blow FUSE

Remote: Female 2 circuit jack, 12 VDC @400 ma. Functions with power on.

Dual Preamp Output: Connect to the inputs of power amps and/or a powered sub woofer

Tape Out: Constant output of selected input signal for recording, independent of volume control setting.

Tape In: This is the tape monitor selected input. For use with recording devices that employ a monitor system to hear the actual recorded signal. May also be used as an additional line input or an input for an equalizer or other signal adapting device.

CD, Aux 1, Aux 2 and Tuner: These are inputs requiring line level inputs from source components. These inputs have wide power bandwidth, flat frequency response.

INSTALLATION AND UNPACKING

WARNING

MAKE NO ATTEMPT TO PUT THE SLP-88 PREAMPLIFIER IN SERVICE WITH THE COVER OFF THE UNIT. CONTACT WITH AC VOLTAGE INSIDE THE SLP-88 CAN BE FATAL!

All our shipping cartons have been especially designed to protect their contents and special care has been taken to prevent damage under normal conditions. Mishandling should be evident upon inspection of the shipping container. If damage is found after visual inspection, do not destroy the evidence. If necessary, document the damage with photographs and contact the transport carrier immediately.

Carefully remove your new SLP-88 from its packing carton and examine it closely for signs of shipping damage. It is recommended to save all original packing cartons to protect your preamplifier should you wish to store it or ship it for after-sales service.

WARRANTY CARD

If you are the original USA purchaser of this preamplifier and purchased it for use within the United States, you should fill out the enclosed warranty registration card and return it to Cary Audio Design, within 10 days of your purchase. Warranty restrictions and applications may apply. Consult the warranty section of this manual. Export models are covered by local warranties assigned by your local Cary Audio distributor.

SLP-88 PLACEMENT

The SLP-88 is designed for use inside of homes. It must be protected from the elements and temperature extremes. For example, avoid placing the unit in extremely hot locations such as near or on top of radiators or other home heating devices. Its location among the user's home audio components is not critical.

POWER REQUIREMENTS

The SLP-88 is designed to operate from AC house current mains. The design voltage is 120 Volts AC at 50/60 Hz. Export units have settings for 100/200/220/240 Volts AC at 50/60 Hz.

INTERCONNECT CABLES

The interconnect cables from the output jacks of the SLP-88 to the input jacks on the power amplifier can be any convenient length your set up requires. The choice of a high quality interconnect cable is important. Most audio dealers will have proper interconnect cables in stock for this purpose. The low output impedance of the SLP-88 will run long interconnect wire runs without a problem.

OPERATION

Your new SLP-88 preamplifier is ready for operation after the various interconnect cables have been installed and the unit is plugged into the household AC mains 120 Volt AC wall socket. The SLP-88 is provided with functional, useful front panel controls with a logical layout.

POWER SWITCH

The power switch is located at the lower left corner on the SLP-88 preamplifier front panel. The switch operates in the following manner:

OFF Removes all AC voltages from the SLP-88 power supply.

ON Turns on the AC voltage to the power transformer primary on. The power transformer has a 200% duty cycle. In simple terms, the transformer is capable of operating two (2) SLP-88 preamplifiers continuously 24 hour a day. We recommend that the AC power switch be left in the ON position at all times. The SLP-88 sounds much better after being warmed up for at least 24 hours.

Operate LED This blue LED will light after the SLP-88 is warmed up and biased properly.

VOLUME CONTROL

The gain of both left and right channels is controlled simultaneously by this control. The control potentiometer is of such high quality that the tracking error is less than 0.5 dB from 0 to -60 dB. The program source remains in balance over the entire range of this control. The taper rate of the volume control has been chosen to provide a rapid increase in gain over the first half of rotation and slower gain increase above 12:00 position. The volume pot is controlling the input signal to the first grids of the 6SN7 tubes. The volume control has a DC motor attached for remote operation.

SELECTOR SWITCH

The 4-position rotary switch connects a choice of input program source, both channels simultaneously. All program line sources are selected from this front panel 4 position switch. As you switch from source to source inputs, you will hear a soft mechanical clicking sound. This is normal and proper. The clicking sound is the double pole, double throw (DPDT) relays switching positions.

WARNING!!!

MAKE NO ATTEMPT TO PUT THE SLP-88 INTO SERVICE WITH THE TOP OFF OR THE CABINET OPEN. NEVER OPERATE THE SLP-88 WITH THE TOP COVER REMOVED. CONTACT WITH OPERATING VOLTAGES PRESENT INSIDE THE SLP-88 CAN BE FATAL!

HEADPHONE SWITCH AND JACK

Switching to the on position will engage two output transformers for the headphones. The primary of each transformer is connected via gold plated relays to the output section of the SLP-88. Please be aware, engaging this switch still allows signal to flow to the Rocket 88 or your basic power amp in your system. Turn off your amplifier to listen to headphones. With this design there are no interruptions in the output signal path. You will note that a blue LED will light above the headphone switch when it is turned to the on position. Make sure that you turn off the headphone switch before listening with your amplifier. It won't harm anything but the low frequencies may be rolled off a bit to the amplifier if the headphone switch is left in the on position.

SPECIAL NOTE: Polarity Inverting Design

Your new SLP-88 is a polarity inverting gain stage preamplifier design. This means that a positive direction signal coming into the SLP-88 will be polarity inverted as it is amplified and sent to the power amplifier as a negative direction signal. The SLP-88 has one gain stage and one buffer stage in each channel. This polarity inversion is common on many high-end preamplifiers. If you are concerned about 'Absolute Phase' in your system, reverse the positive and negative leads either on the back of both loudspeakers or at the output terminals of the power amplifier. Remember to do this for both channels. Please remember, only switch the speaker cable polarity at the power amplifier or at the loudspeaker, not at both. Once again, operating in the polarity inverted phase mode will not harm or hurt anything.

FACTORY SERVICE

If it becomes necessary to replace any parts in the SLP-88, the same brand and part number and style should be used. New parts are available from Cary Audio Design, Inc. in Cary, North Carolina.

Careful consideration has been given to the design of your new SLP-88 preamplifier to keep maintenance problems to a minimum; however, it is possible that some problems may arise. If this occurs, we suggest contacting our Customer Service Department at phone number 919-355-0010 from 1 to 5 PM East Coast time to describe your problem in detail. Do not return the SLP-88 to the factory without a Return Authorization Number (RMA number) from the Customer Service Department. As the packing and shipping is being done by others, Cary Audio Design will assume no responsibility if the transportation company refuses to pay a damage claim due to your improperly packing or for lack of insurance should the unit be lost or damaged in shipment from you to us.

NOTES

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